

ABSTRACT

A method and system for outputting and reproducing information representing a digital image alleviates system bus bottlenecks by downloading image information from the RAM to an Application Specific Integrated Circuit (ASIC), download controlled by the ASIC, and allowing the ASIC to directly interface with and directly control the operation of an output device. The ASIC and the output device are directly connected thereto via a dedicated bus. While the ASIC downloading image information from the RAM, the system processor performs calculations needed for certain portions of the image prior to output and reproduction. In the preferred embodiment, the system is a franking machine, and the output device is an ink jet printer wherein the print heads directly interface with the ASIC. The image, representing postage and other postal-related information, is also arranged so that when it is reproduced on a moving piece of mail or the like, the portion of the image not needing calculations to be finalized, is initially printed. In one embodiment, the calculations are used to calculate the correct postage for the moving piece of mail. The system also novelly includes density control for improving the operation, because more than one ink drop is placed in a pixel, because the image resolution is lower than the physical resolution of the print heads. A lower density can be printed with the same resolution, by printing only one ink drop in the pixel area. This results in a lower ink consummation of the franking machine. It is possible to change between low and high density within one imprint.